

## Elevate Labs (Cyber-Security Internship)

### Task 8: Identify and Remove Suspicious Browser Extensions

**Objective:** Understand the role of VPNs in protecting privacy and secure communication.

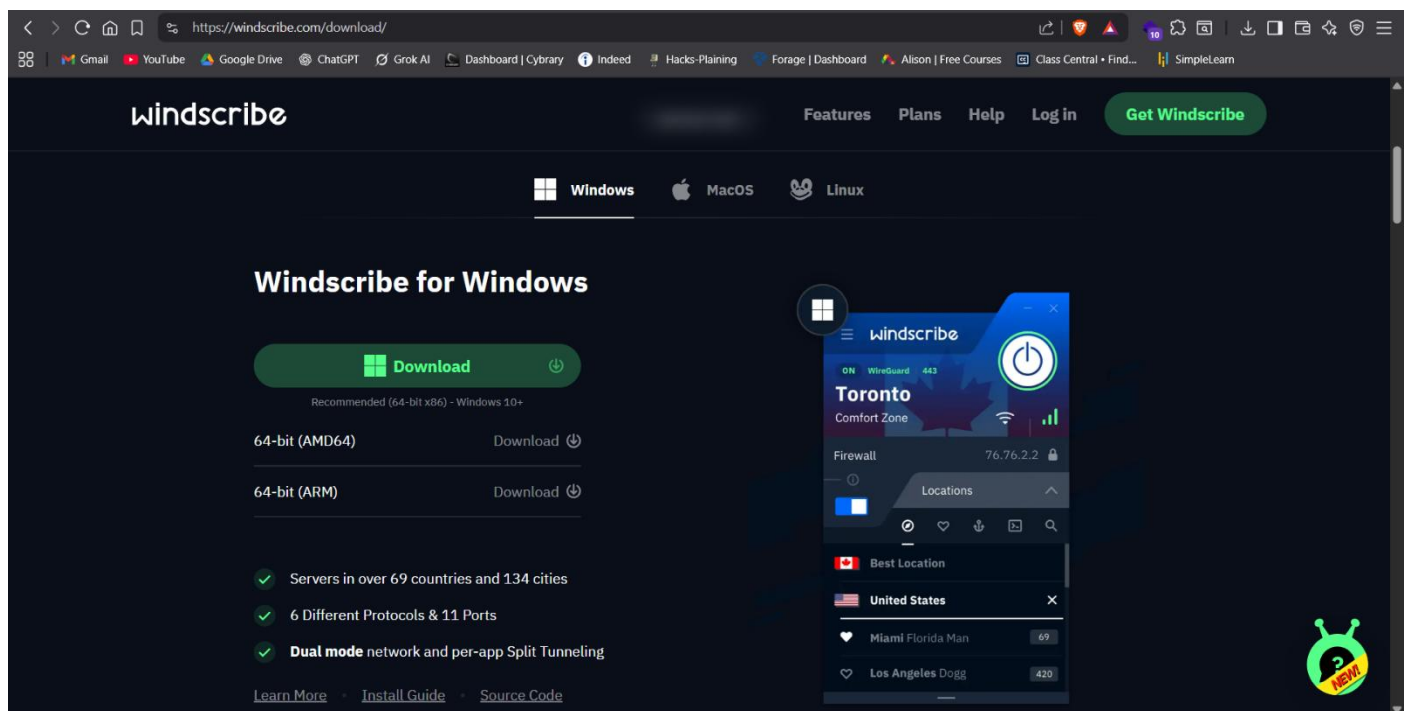
**Tools:** Free VPN client (ProtonVPN free tier, Windscribe free)

**Deliverables:** Report describing VPN setup steps and connection status screenshot.

### Report:

#### - Windscribe VPN (Virtual Private Network):

**Step 1:** Download Windscribe VPN from official website for FREE, based on your Operating-System (OS).



Step 2: Now, we will SET-UP an Account for Windscribe VPN.

https://windscribe.com/myaccount

GmailYouTubeGoogle DriveChatGPTGrok AIDashboard | CybraryIndeedHacks-PlainingForage | DashboardAlison | Free CoursesClass Central • Find...SimpleLearn

windscribe

FeaturesPricingSupportDownloadMy Account

Account Overview

My AccountR.O.B.E.R.T.Port ForwardingScribeForce

Username

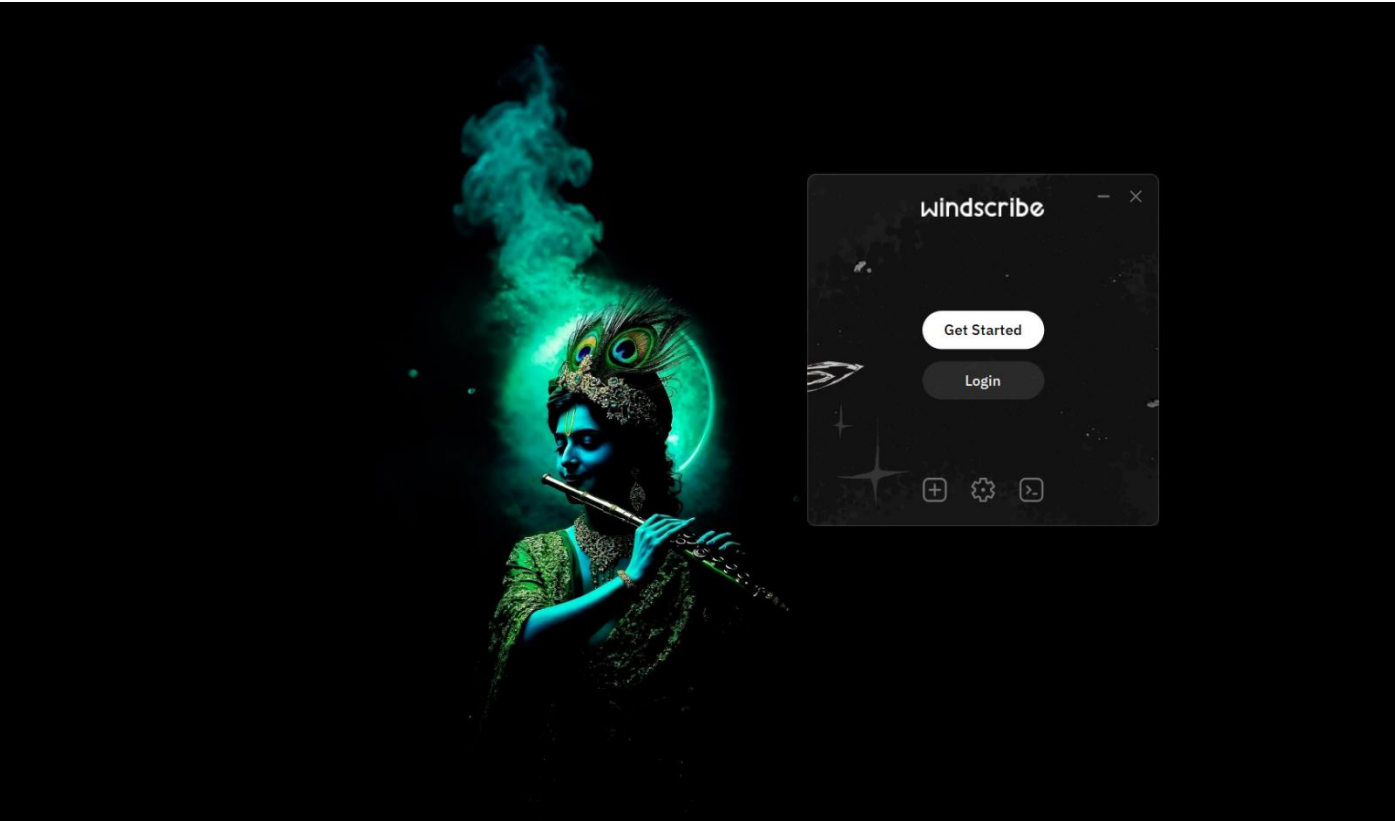
Neon\_White

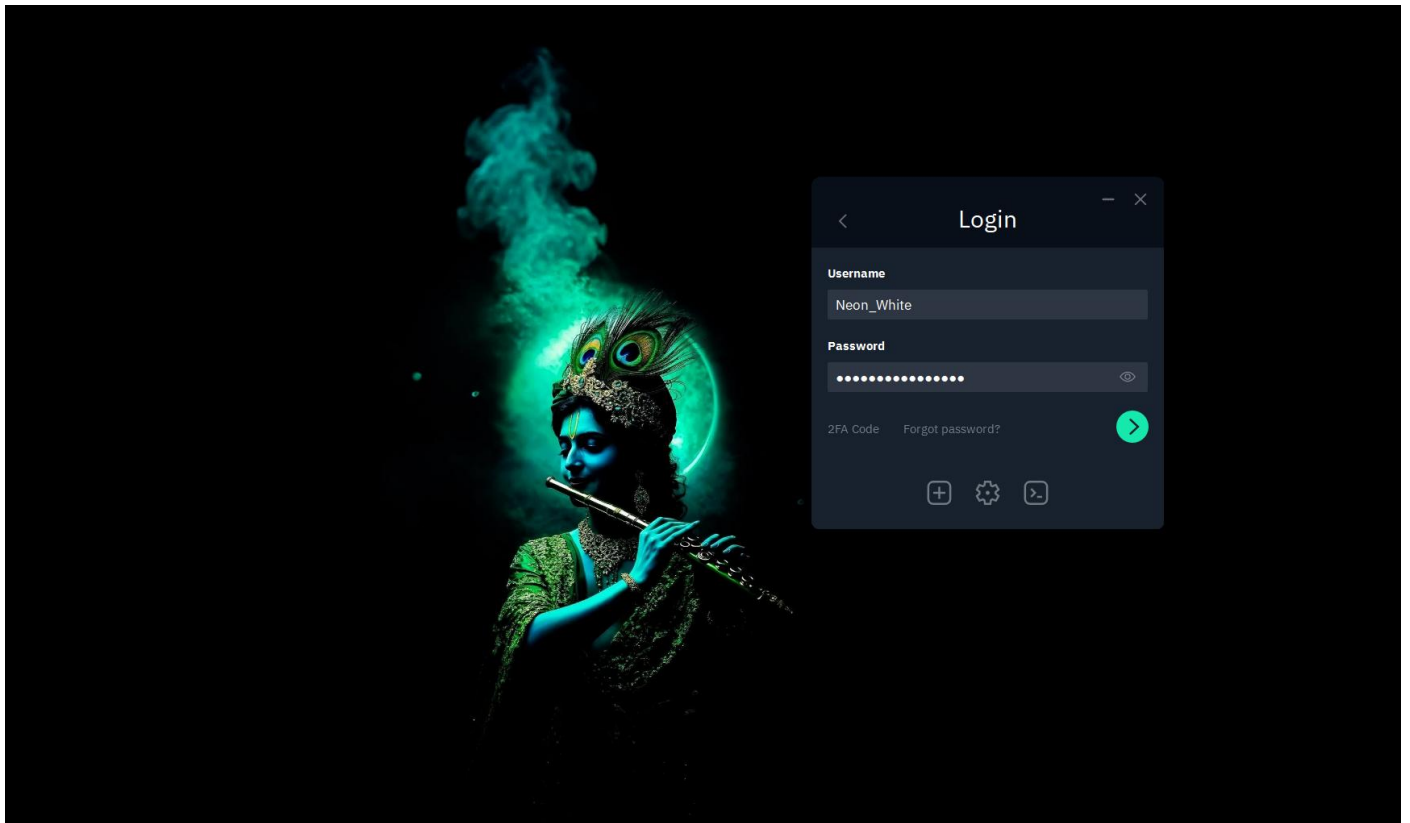
Member Since

August 15th 2025  
Delete Account

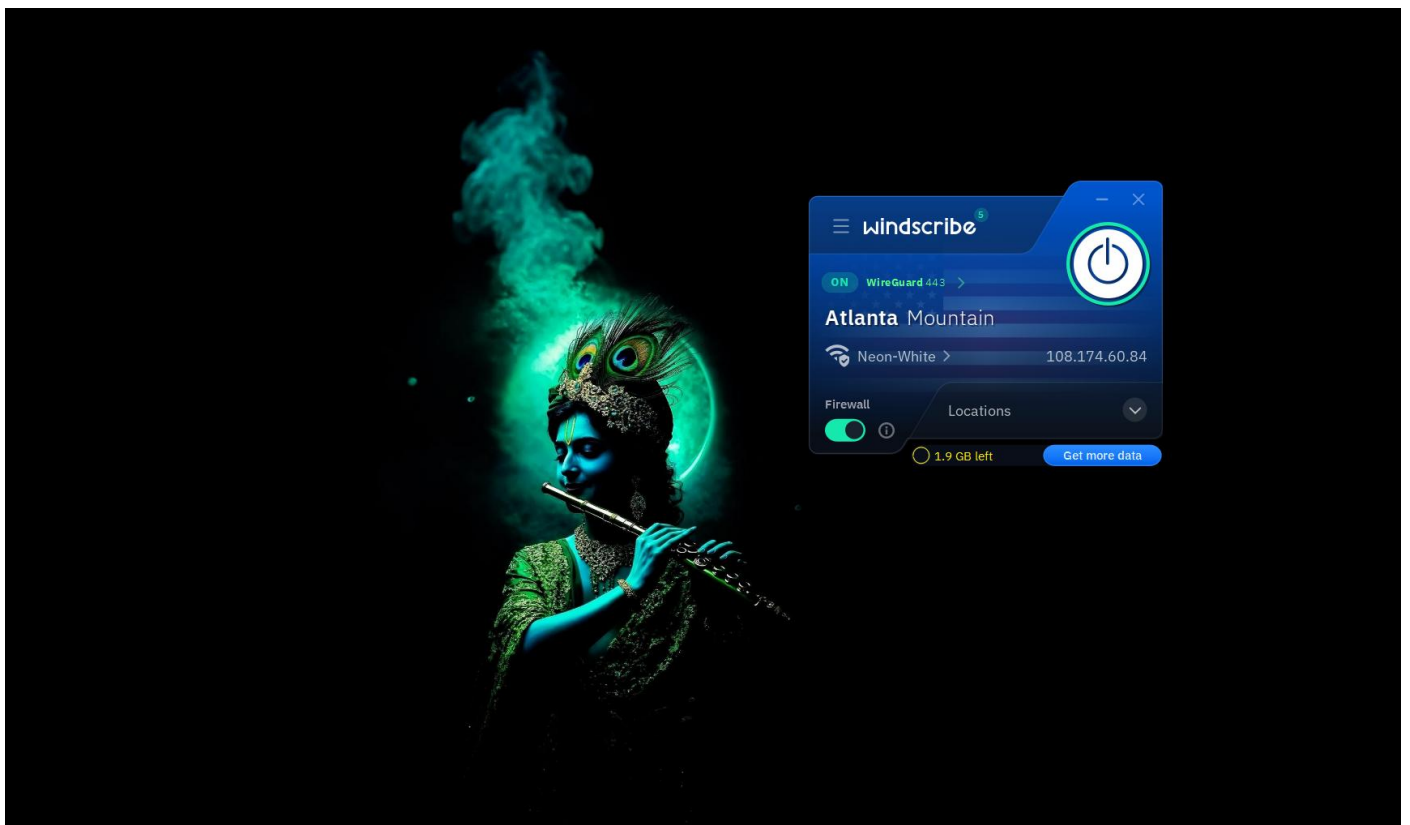
Email

Password





**Step 3:** Now, we will CHOOSE any Location to set-up a Virtual Private Network.



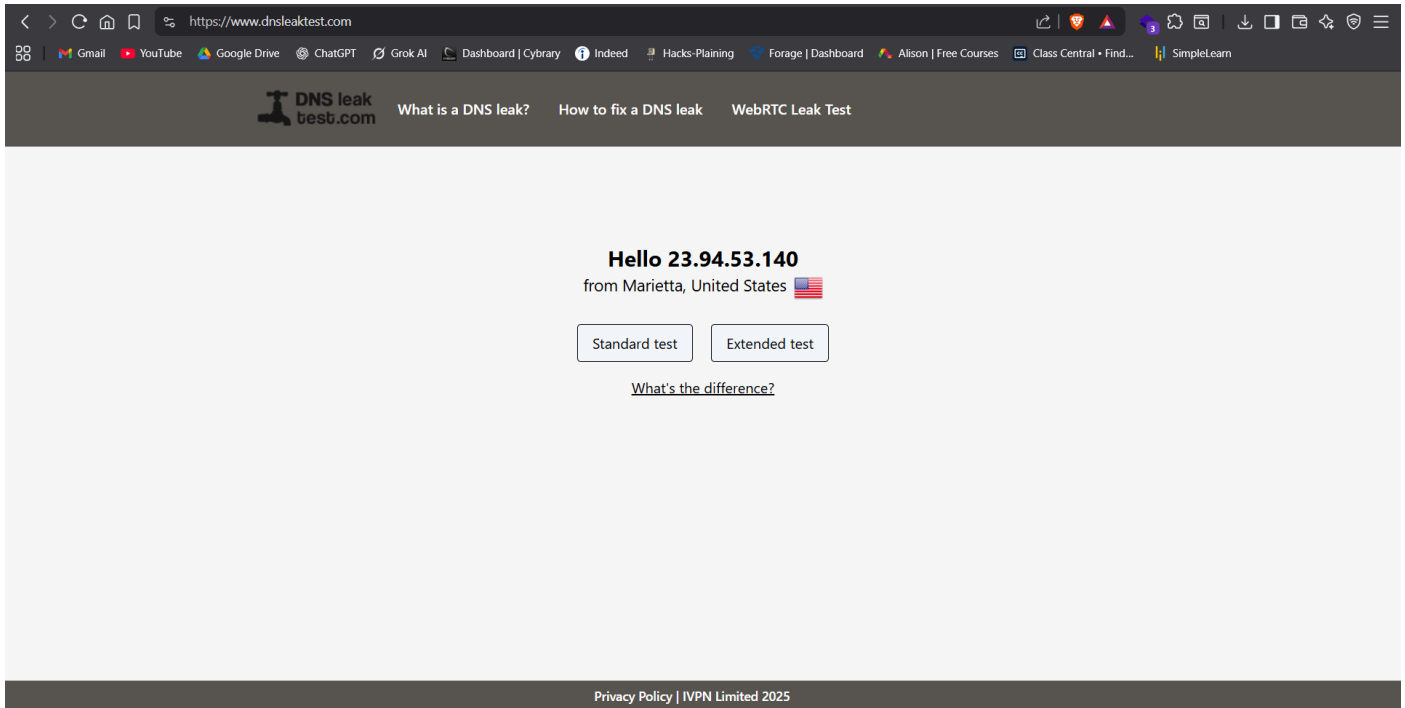
**Step 4:** Then we will, CHECK that our VPN is Working or NOT.

The screenshot shows the homepage of WhatIsMyIPAddress.com. The browser's address bar displays the URL <https://whatismyipaddress.com>. The website's header includes a search bar with the placeholder text "Enter Keywords or IP Address" and a "Search" button. Navigation links for "ABOUT", "PRESS", "PODCAST", and "SUPPORT" are visible. A menu bar contains links for "MY IP", "IP LOOKUP", "HIDE MY IP", "VPNS", "TOOLS", and "LEARN". The main content area displays the user's IP address information: "My IP Address is:" followed by "IPv4: 23.94.53.140" and "IPv6: Not detected". Below this, "My IP Information:" lists the ISP as "Windscribe Limited", Services as "VPN Server", City as "Marietta", and Region as "Georgia". A red button labeled "RATE YOUR VPN" is prominently displayed. A map of the United States shows the location near Atlanta, Georgia, with a note "Location not accurate? Update My IP Location". A message states "Looks like you're using a VPN!" with a link to "Show Complete IP Details".

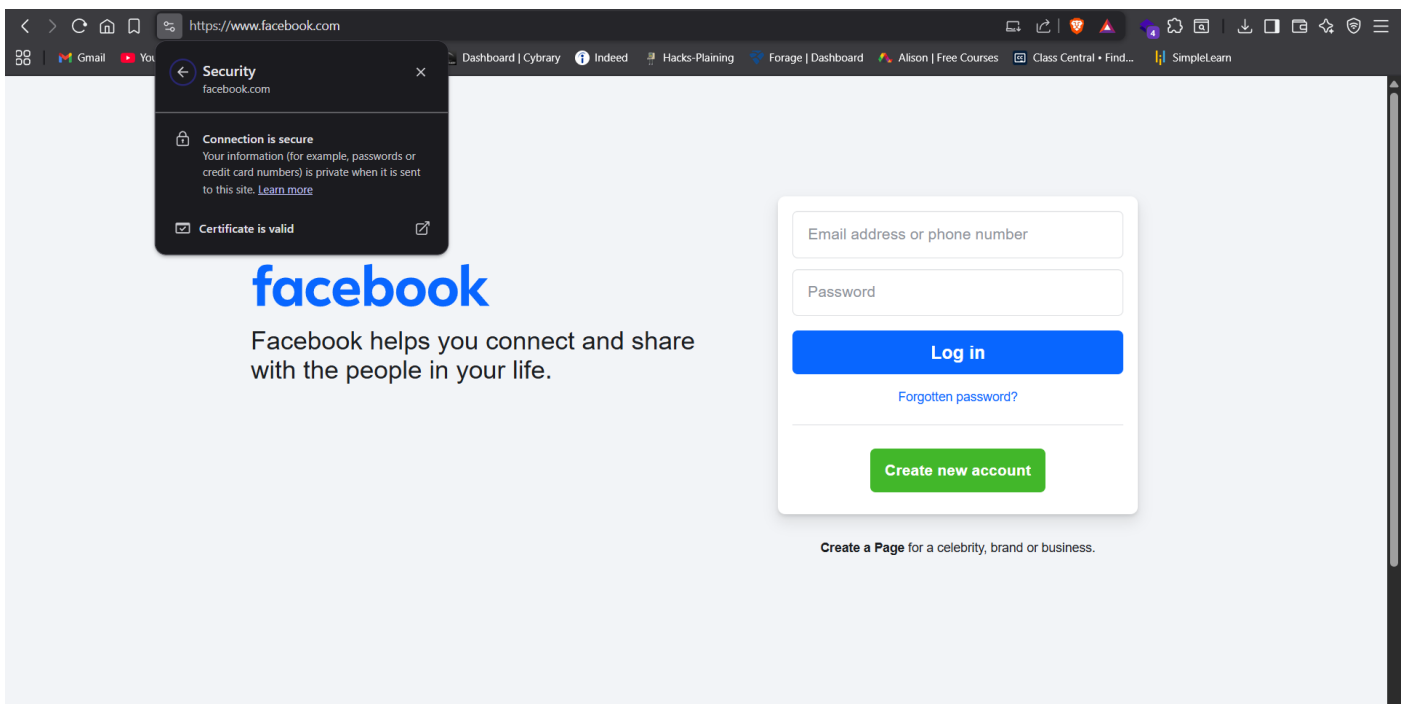
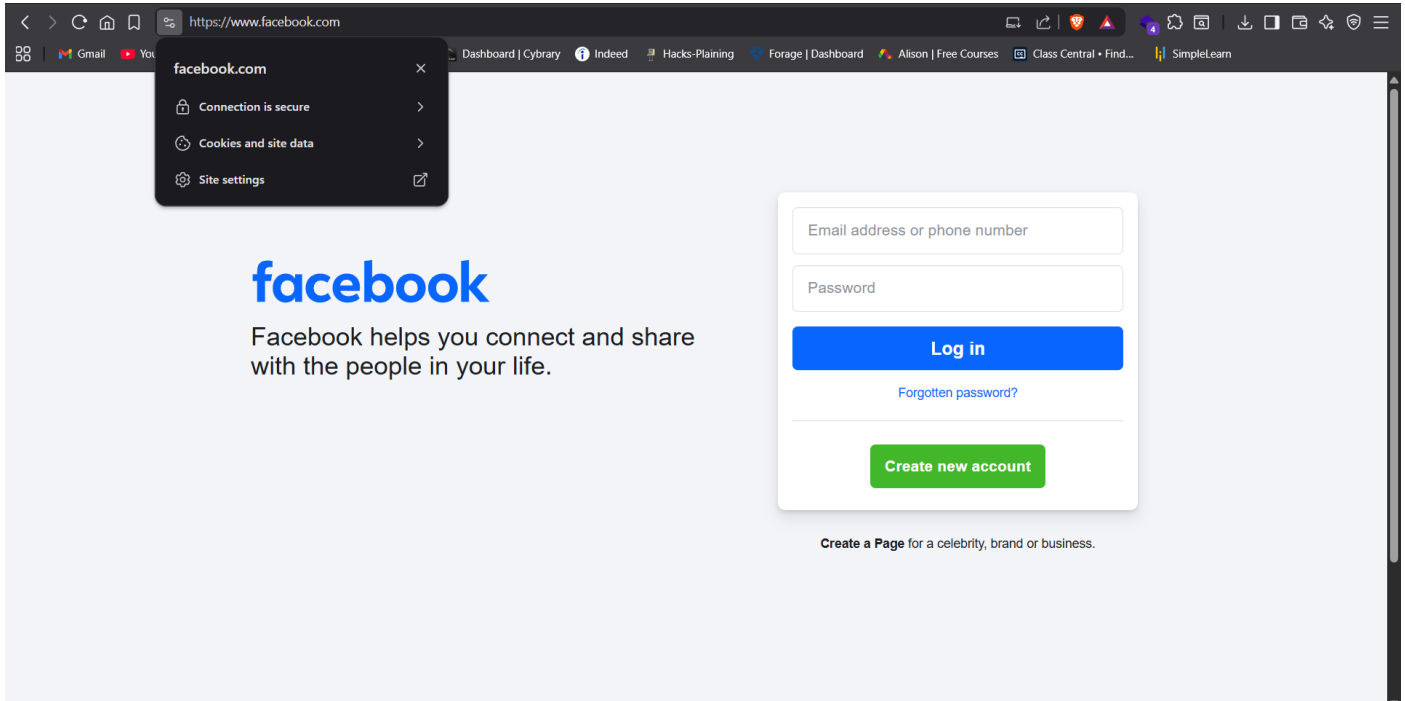
**Step 5:** Then we will, Perform SPEED-TEST of Working VPN.

The screenshot shows the Speedtest.net website displaying test results. The browser's address bar shows the URL <https://www.speedtest.net/result/18102667300>. The website's header includes a "SPEEDTEST" logo and navigation links for "English", "Apps", "Learn", "Data", "About", and a user profile icon. The main content area features a "SHARE" button and a "Result ID 18102667300". The test results are displayed as follows: "DOWNLOAD Mbps" at 3.63, "UPLOAD Mbps" at 1.80, and "Ping ms" at 328. A "GO" button is visible. The "Connections" section lists "Multi", "Firedog SSC Woodstock, GA", and "Change Server". The "ColoCrossing" section shows the IP address "23.94.53.140". A "HOW LIKELY IS IT THAT YOU WOULD RECOMMEND COLOCROSSING TO A FRIEND OR COLLEAGUE?" section includes a rating scale from 0 to 10. A "Find Your Next ISP with Speedtest's Help" section prompts the user to enter their zip code to tailor the results, with a "Search" button.

**Step 6:** Then, Perform DNS-Leak Test from: <https://www.dnsleaktest.com>



**Step 7:** At-Last, we will CHECK that Virtual Private Network uses (HTTPS) Secure Protocol for Network Traffic.



**Step 8: (Optional)**, we can CHECK (VPN – Virtual Private Network) Configurations through CLI – Command Line based on your Operating System (OS).

```
Command Prompt
Microsoft Windows [Version 10.0.26100.4946]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Neon-White>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Unknown adapter WindscribeWireguard:

    Connection-specific DNS Suffix  . :
    IPv4 Address. . . . . : 100.119.204.134
    Subnet Mask . . . . . : 255.255.255.255
    Default Gateway . . . . . :
```

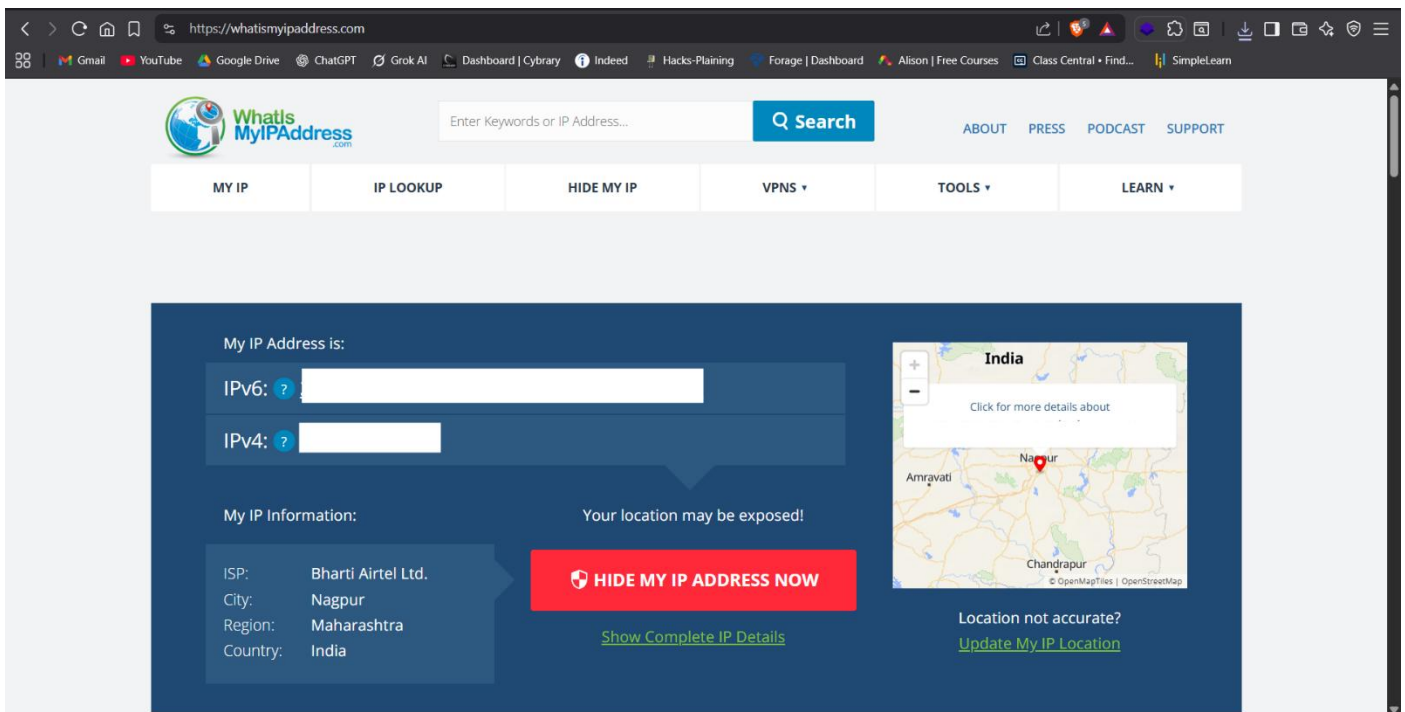
```
Command Prompt

C:\Users\Neon-White>ping -4 google.com

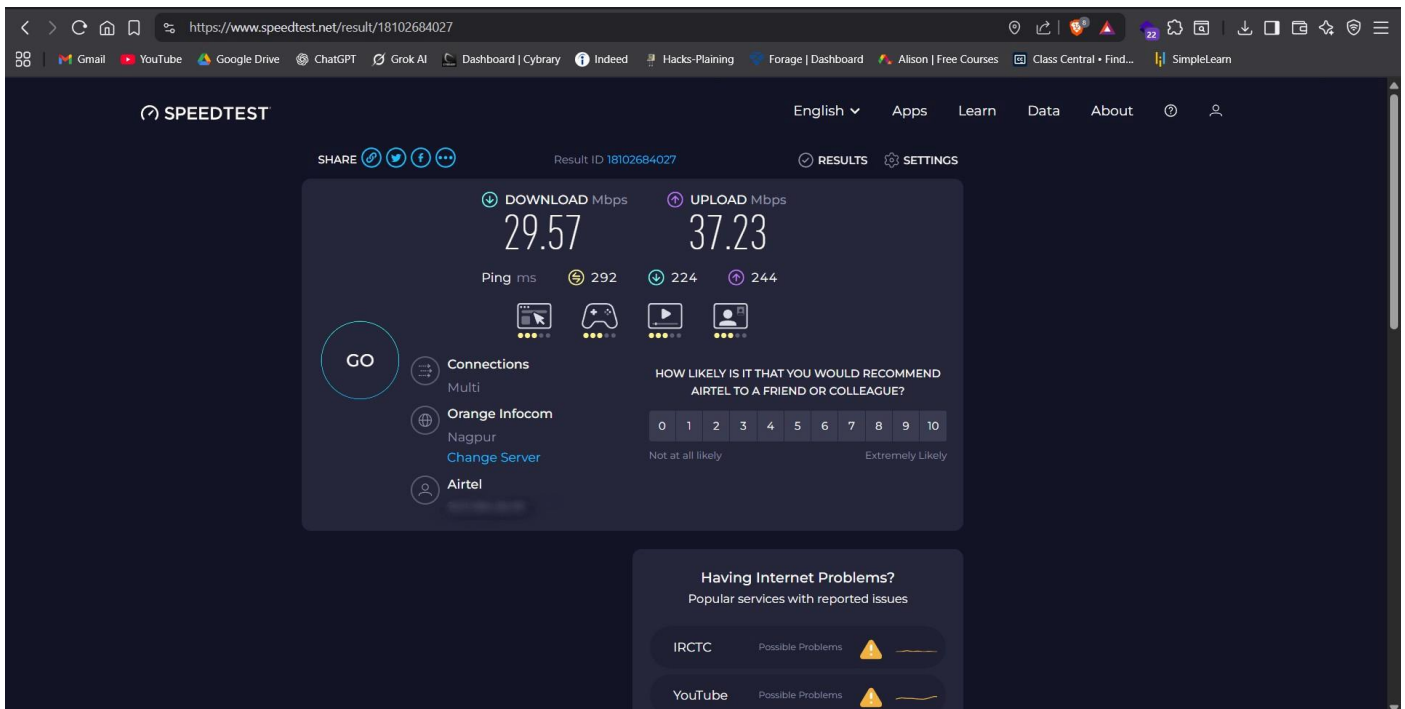
Pinging google.com [74.125.138.102] with 32 bytes of data:
Reply from 74.125.138.102: bytes=32 time=619ms TTL=106
Reply from 74.125.138.102: bytes=32 time=266ms TTL=106
Reply from 74.125.138.102: bytes=32 time=260ms TTL=106
Reply from 74.125.138.102: bytes=32 time=304ms TTL=106

Ping statistics for 74.125.138.102:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 260ms, Maximum = 619ms, Average = 362ms
```

**Step 9:** Now, we will OFF the Windscribe VPN & Check out IP-Address.



**Step 10:** At-Last, now we will PERFORM (Speed-Test) while VPN is OFF.



## Benefits

- **IP masking & location privacy** (sites see VPN exit IP, not your home IP).
- **Encryption on untrusted networks** (e.g., public Wi-Fi) between you and the VPN server.
- **Bypass local blocking/geo-restrictions** in some cases.
- **Throttling avoidance** (sometimes) if ISP throttles certain categories.

## Limitations

- **Trust shift:** You must trust the VPN provider more than your ISP/local network.
- **Not a magic cloak:** Browser logins, cookies, and fingerprinting can still identify you.
- **Performance overhead:** Added latency; possible speed reduction, especially on distant servers.
- **Geo-services and streaming** may block known VPN IP ranges.
- **Legal/Policy constraints:** Some regions restrict VPN use—know your local laws and terms.